

CLAIMS

I Claim,

1. An axial compliant means for a scroll machine, wherein,
a second scroll revolving around a first scroll, the
5 pressure of a working fluid as a result of such revolution
being on the increase gradually and radial-inwardly
among multiple compression chambers including a low
pressure chamber, a medium pressure chamber and a high
pressure chamber; a force being created by the pressure
10 of a working fluid flowing through the medium pressure
chamber; a piston pushed by the force pushing both of
the second scroll and the first scroll to be axially
in touch with each other; and an axial sealing status
being achieved for both of the scrolls is characterized
15 by that multiple guiding posts being secured on the
sliding travel of the piston; the sliding piston being
guided by those guiding posts and the slanting angle
of the sliding piston being decreased to achieve better
axial sealing results for both of the second scroll
20 and the first scroll.
2. An axial compliant means for a scroll machine as claimed
in Claim 1, wherein, those multiple guiding posts being
secured to the first scroll and to the frame by securing
bolts; and corresponding multiple guided holes being
25 provided on the circumference of the piston to receive
insertion of those multiple guiding posts.
3. An axial compliant means for a scroll machine as claimed
in Claim 1, wherein, those multiple guiding posts being
secured to the frame by securing bolts; and
30 corresponding multiple guided holes being provided

through the body of the piston to receive insertion of those multiple guiding posts.

4. An axial compliant means for a scroll machine as claimed in Claim 1, wherein, those multiple guiding posts being secured to the frame by securing bolts; and corresponding multiple guided holes being provided on the circumference of the first scroll and of the piston to receive insertion of those multiple guiding posts.

5. An axial compliant means for a scroll machine as claimed in Claim 1, wherein, a flow passage is provided connecting one side to the medium pressure chamber of those compression chambers defined by both of the scrolls through the first scroll and connecting the other side to an annular recess through the body of the frame; the working fluid in the medium pressure chamber being guided through the flow passage into the annular recess; and a force being exercised through the pressure of the working fluid on the piston to push against the second scroll.

6. An axial compliant means for a scroll machine as claimed in Claim 1, wherein, a flow passage is provided connecting one side to the medium pressure chamber defined by both of the scrolls through the second scroll and connecting the other side to an annular recess through the body of the piston; the working fluid in the medium pressure chamber being guided through the flow passage into the annular recess; and a force being exercised through the pressure of the working fluid on the piston to push against the second scroll.

7. An axial compliant means for a scroll machine as claimed

in Claims 5 and 6, wherein, the annular recess being formed by an annular ring provided integrally onto the piston and inserted into an annular recess on the frame; a sealing element being each provided sealing respectively the inner and the outer circumferences of the corresponding annular ring and recess.

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8. An axial compliant means for a scroll machine as claimed in Claims 5 and 6, wherein, the annular recess being formed by an annular ring provided integrally onto the frame and inserted into an annular recess on the piston; and a sealing element being each provided sealing respectively the inner and the outer circumferences of the corresponding annular ring and recess.

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9. An axial compliant means for a scroll machine as claimed in Claims 5 and 6, wherein, the annular recess being formed by an annular ring provided independently and inserted into an annular recess on the frame; and a sealing element being each provided sealing respectively the inner and the outer circumferences of the corresponding annular ring and recess.

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10. An axial compliant means for a scroll machine as claimed in Claims 5 and 6, wherein, the annular recess being formed by an annular ring provided independently and inserted into an annular recess on the piston; and a sealing element being each provided sealing respectively the inner and the outer circumferences of the corresponding annular ring and recess.

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